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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 27935.3-2011

**Graphic technology -- Prepress digital data exchange -- Use of
PDF -- Part 3: Complete exchange suitable for colour managed
workflows (PDF/X-3)**

印刷技术 印前数据交换 PDF的使用 第3部分：颜色管理工作流程中的完整数据交
换(PDF/X-3)

(English Translation)

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Foreword

GB/T 27935 "Graphic technology - Prepress digital data exchange using PDF" includes the following eight sections.

- Part 1. Use the full data CMYK data exchange (PDF/X-1 and PDF/X-1a);
- Part 2. Guidelines for printing the data exchange part (PDF/X-2);
- Part 3. Color management workflows full data exchange (PDF/X-3);
- Part 4. Use PDF1.4 (PDF/X-1a) of CMYK and spot color data exchange data completely;
- Part 5. Use PDF1.4 (PDF/X-2) portion of print data exchange;
- Part 6. Use PDF1.4 (PDF/X-3) is used to print color management workflow fully switched data;
- Part 7. Use PDF1.6 (PDF/X-4) and the exchange of data is completely printed using an external reference (PDF/X-4P) Number of print it is part of the exchange;
- Part 8. use part of swap PDF1.6 (PDF/X-5) of the print data.

This section GB/T 27935 Part 3.

This section drafted in accordance with GB/T 1.1-2009 given rules.

This section uses the translation method identical with ISO 15930-3. Part 3 2002 "Graphic technology - Prepress digital data exchange using PDF Score. color management workflow full data exchange (PDF/X-3) ".

This section of the text formatting editorial changes according to GB/T 1.1 requirements.

Please note that some of the content of this document may involve patents. Release mechanism of the present document does not assume responsibility for the identification of these patents.

This section proposed by the People's Republic of China Press and Publication Administration.

This part of the National Standardization Technical Committee printing (SAC/TC170) centralized.

This section is drafted. Heshan Astros Printing Co., Ltd., Shanghai Polytechnic University, Beijing University Founder Electronics Co., Ltd.

Introduction

GB/T 27935 defines a data exchange, for the printing industry internal documents and printing data exchange between enterprises exchange offer Basis. GB/T 27935 composed of several parts, each part of which is suitable for different workflow needs. These efforts the degree of flexibility required for the process is different, but the higher the degree of flexibility, uncertainty or error incidence workflow higher.

GB/T 27935 in the various parts of the target aimed at maintaining the premise of workflow flexibility, to minimize uncertainty.

Typically, the composition of pages of printed documents can be created in different places, it may be created by different companies. These different sources of Page will be incorporated into a final print file can then be printed in different places. In addition, some page elements may also be Send to multiple receivers into other documents. In GB/T 27935 in each page is treated as a complex entity.

There are a variety of data formats and structures can be used to organize and create the above page, which is more common to use two data structures. This Two data structures are used to encode raster graphics and vector data and text messages encoded image information, which also includes a warp Over rasterized graphics and text information processed. Both data structures along with a page description information is open digitization Process necessary. Definitions use TIFF/IT file format raster data exchange GB/T 22113 in. GB/T 27935 is scheduled Meaning the data exchange format based on objects, where each object can be either vector data structures can also be a raster data structure.

As part of this supplement GB/T 27935 other part, defines a data format and method of use, allowing a complex Combined entity in the form of a single document in accordance with the requirements of the expected distribution to one or more destinations. The file can contain color management information Pre-printed document, it can be pre-printed document contains CMYK data, and the file must be included by the sender settings file Processing and rendering all the content information related to, this information is encoded in a single PDF file, does not require or permit the use of outside Unit linked files or embedded within the file. This data exchange is not required to predict the sender and receiver of the environment, it is sometimes also referred to as "blind" Exchange, data exchange mode regardless of the software platform and transmission.

These goals can be defined by an open Adobe Portable Document Format (version 1.3) of the specific use to achieve. In order to achieve data the purpose of the exchange, vague explanation to avoid problems when the file, the method determines a finite limit that can be used for PDF Like set, and adds rules to limit the use of these keywords and objects contained inside.

Although PDF/X-3 standard defines contains all the elements of a complete data exchange, but there are some circumstances not applicable. In certain workers Workflow, some or all of the references to the elements stored in the file receiving end may be more logical, and these elements may also be cited in Exchanged at different times. These elements include fonts, high resolution continuous tone image file, line art files. Under normal circumstances, this these data exchange requires the sender and receiver to agree beforehand. About this requirement have been made in GB/T 27935 of the other part it explained. Other restrictions for CMYK data exchange requirements may be more, the information contained GB/T 27935.1 in.

Although GB/T 27935 of the first part did not take into account the requirement to re-use data, but has retained the largest data Flexibility to meet the data might be raised in the future re-use needs.

Can predict the future, we will develop a series based on PDF/X-1 standard products, such as reading PDF/X files (including the reader) to write Software, and integrated software products said reading and writing functions. Based on the application requirements, product developers will develop different software products. for the preparation, processing and interpretation based on the actual application and compliant file, the software will integrate the various functional components. However, more than the more important point is that, in line with standard PDF file reader software must be able to read and process all the appropriate specifications that meet the specified level PDF file.

Graphic technology - Prepress digital data exchange using PDF Part 3. Color management workflow Complete data exchange (PDF/X-3)

1 Scope

GB/T 27935 in this section are described in detail using PDF (Portable Document in a single data exchange process Format) to achieve complete digital data distribution method, these data contain all the elements required for the final printed copy. Such exchange Mode supports color management workflow and traditional CMYK workflow.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references, the latest edition (including any amendments) applies to this document.

ICC.1.1998-09, describe the color file formats, international color alliance;

Adobe Portable Document Format, version 1.3, 2nd edition, 2000, Adobe company (ISBN0-201-61588-6);

Adobe Technical Description 3.1 Bleed printing bleeding Finished format beyond the range are cropped image is called bleeding. In the cutting process, a reasonable set printing bleeding can be avoided Due to a mechanical error caused the finished product is exposed to the white side or cut content.

NOTE: Bleeding region including the printed area can be, but does not include any kind of printed indicia.

Characterized printing conditions characterizedprintingcondition it defines the various printing conditions (offset, gravure, flexo, direct printing, etc.) of the process control target to determine the status of a variety of printing Conversion relation tone value of the printed image (typically CMYK values) and chrominance values, and the translation is by way of electronic documents save.

Note 1: Typically the input data (print tone value, typically CMYK data) is called the conversion feature of the relationship between the printed image color values.

Note 2: The printing process control objectives and corresponding color information after the general characteristics required by the standard certification made public, but also by industry associations.

Complete data exchange completeexchange Including data exchange and complex entities processing complex exchange of information for all entities. All the elements of the composite entity and its funding Source can be included in a PDF file. Information for handling complex entity may be either present in the composite entity to be in GB/T 27935 in this part of the standard and the standard reference document specified.